



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,187	09/29/2003	Jung-Seon Park	CU-3337 VE	2658

26530 7590 01/23/2007
LADAS & PARRY LLP
224 SOUTH MICHIGAN AVENUE
SUITE 1600
CHICAGO, IL 60604

EXAMINER

GUIDOTTI, LAURA COLE

ART UNIT	PAPER NUMBER
----------	--------------

1744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/674,187

Applicant(s)

PARK ET AL.

Examiner

Laura C. Guidotti

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-16 is/are rejected.
- 7) ☒ Claim(s) 2,3 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1 and 4-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver et al., US 5,524,321 in view of Kilström, US 5,935,279 and Ohta et al., US 6,859,975.

Weaver et al. disclose a vacuum cleaner that comprises a nozzle assembly (16), a main body (14) having a dust collector (130), a dust receptacle (filter bag 139), a main body frame having an upper casing (46, Figure 5) and a lower casing (44, Figure 5), a button operation portion formed on an upper part of the main body frame (70, Figure 9), a motor within the main body generating a suction at the nozzle assembly (166, Column

Art Unit: 1744

4 Lines 41-57), a frame portion (18, 82, best shown in Figure 4), pivotably connected with the nozzle assembly (Column 2 Lines 3-6), wherein the main body is detachable from the frame portion by operation of the button operation portion (Column 7 Lines 19-21), the main body being operable and capable of drawing dust and dirt into the dust collector when the main body is detached from the frame portion (Column 8 Lines 1-8). Regarding claim 4, the main body comprises a handle portion to permit a user to grab on the upper part (60) (claims 1 and 16). Regarding claim 5, the handle portion is shaped to correspond to the shape of the button operation portion and includes a hollow recess therein (shown in Figures 1, 4, 5, and 9). Regarding claim 6, the main body further comprises on one side thereof a rotatable first cord holder (68, see rotational directional arrows Figure 1) and a stationary second cord holder formed at a predetermined distance from the first cord holder (66). Regarding claim 7, the main body further comprises a communicating member disposed at a bottom part of the main body (94, Figure 5). Regarding claim 8, the main body includes a rear portion (54, facing out of the page in Figure 2 or the upper portion of the main body in Figure 8) and further includes a flexible hose (90) capable of being connected to the communicating member (Figure 5), a house supporting member (92), and a discharging grill through which clean air is discharged (58). Regarding claim 9, the flexible hose is removably connected to the communicating member (Column 3 Lines 35-44), and when removed, capable of being connected with an auxiliary accessory on one end thereof (Column 3 Lines 49-54). Regarding claim 10, the main body further comprises an on/off switch located on a front side of the main body (62, Figure 1). Regarding claim 11, the frame

Art Unit: 1744

portion further includes at least one supporter formed on at least one side thereof to provide support for the main body (84). Regarding claim 12, the supporter has a mounting guide on one side of the supporter for the mounting of accessories for use with the vacuum cleaner (100, Figure 9). Regarding claim 14, the frame portion further comprises wheels on both sides of a bottom thereof to permit easier motion of the vacuum cleaner over the area to be cleaned (110, 111). Regarding claim 15, the frame portion has a frame handle portion extending upwardly from the top of the frame portion (86) and a handle recess corresponding to the button operation portion of the main body (Figure 1). Weaver et al. does not include that the dust collector is a cyclone dust collector for centrifugally separating dust or dirt from the air or a connecting projection integrally formed with the button operation portion, capable of moving together with the button operation portion along with a connecting groove capable of receiving the connecting portion.

Kilström teaches a vacuum cleaner that particularly teaches that it is known and desirable to convert a vacuum cleaner having a conventional dust bag into a cyclone vacuum cleaner that can be easily installed on the vacuum cleaner (Column 1 Lines 62-67, Column 2 Lines 12-24). The cyclone operates and removes dust or dirt through the air by centrifugal forces (Column 5 Lines 21-26) and the dust receptacle (45) collects the separated dust or dirt.

Ohta et al. particularly teach a main body (4) having a button operation portion formed on an upper part of the main body frame (48b, Figure 4), and a connecting projection (the vertical extension of 48b that engages 1a, see Figures 3-4; Column 7

Art Unit: 1744

Lines 1-4) integrally formed with the button operation portion capable of moving together with the button operation portion (Figures 3-4; Column 7 Lines 1-4), and a frame portion (1) pivotably connected with the nozzle assembly (Column 5 Lines 1-4) having a connecting groove capable of receiving the connecting projection therein (1a; Column 4 Lines 1-4). Regarding claim 13, the connecting groove (1a) further includes a slanted part (as shown in Figure 3, the portion 1a slants at a downward angle).

It would have been obvious for one of ordinary skill in the art to substitute the conventional dust collector and receptacle of Weaver et al. for a cyclone dust collector having a receptacle, such as the one Kilström teaches, in order for a user to be able to easily install and dispose of debris, and further it would have been obvious for one of ordinary skill in the art to substitute the button operation portion and modify the frame portion of Weaver et al., for a button portion having an integrally formed connecting projection that is received in a connecting groove of the frame, as Ohta et al. teach, in order for a user to easily and ergonomically remove a main body from a frame of a vacuum cleaner.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

Art Unit: 1744

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 4-5, 7, and 10-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-10, and 19 of copending Application No. 10/675088. Although the conflicting claims are not identical, they are not patentably distinct from each other because '088 encompasses all the limitations of the present invention, with exception that the dust collector is a cyclone and the main body frame has an upper and lower casing. A main body frame inherently has an upper and lower casing portion. Otherwise, the same terminology is used for each element in both applications and therefore, each claim of the present invention will be matched up with a claim in '088, rather than matching up identical limitations in both applications. Claims 1 and 6-8 of '088 encompass claims 1 and 16. Claim 3 of '088 reads on Claim 11. Claim 4 of '088 reads on claim 12. Claim 5 of '088 reads on claim 14. Claim 7 of '088 also reads on claims 4-5 and 15. Claim 9 of '088 reads on claim 13. Claim 10 of '088 encompasses claim 7. Claim 19 of '088 reads on claim 10. It would have been obvious for one of ordinary skill in the art to modify the vacuum cleaner of Application No. 10/675088 so that the dust collector is a cyclone as

Art Unit: 1744

cyclonic dust collectors for centrifugally separating dust and dirt is a well known dirt separation technique used in vacuum cleaners.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

3. Claims 2-3 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

US 2002/0162188 to Harmen, US 6,735,818 to Hamada et al., and US 6,859,975 to Ohta et al. does not include a button operation portion that is semicircular, a pressing button integrally formed with the button operation portion body at a top part thereof, or a guide extended from one side of the button operation portion. Additionally, US 6,839,934 to Houghton et al. includes a similar vacuum that is convertible and connects to a separate vacuum cleaner body that further includes a nozzle. Also, Houghton et al. discloses a semicircular button operation portion body (31) and an integral connecting projection (151). Houghton et al. does not disclose a button operation portion formed on the main body frame, that the main body that has a cyclone dust collector, a frame portion having a connecting groove capable of receiving the connecting projection therein, or particularly that the button portion further comprises a pressing button

Art Unit: 1744

integrally formed with the button operation portion body at a top part thereof, or a guide extended from one side of the button operation portion.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone

Art Unit: 1744

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LCG
lcg


GLADYS JP CORCORAN
SUPERVISORY PATENT EXAMINER